

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application;

1. (Previously Presented) A reproducing apparatus for a record medium, the reproducing apparatus comprising:

a head portion for scanning a record medium on which content data are recorded, wherein management information and additional information are embedded in the content data; the management information correspond to copy management; and the additional information contains one of error detection code and error correction code added to the management information;

a demodulation processing portion for performing a demodulating process on data read from the record medium by the head portion;

a detecting circuit portion for detecting the additional information from an output signal of the demodulation processing portion; and

a determining circuit portion for performing an error detecting process on a detected result from the detecting circuit portion corresponding to the error detection code contained in the additional information detected by the detecting circuit portion and controlling an output operation for the output signal of the demodulation processing portion for the content data read from the record medium corresponding to the management information when no error occurs in the error detecting process.

2. (Previously Presented) The reproducing apparatus for the record medium as set forth in claim 1,

wherein the determining circuit portion rewrites the management information and adds one of the error detection code and the error correction code to the rewritten management information without modification when the determining circuit portion outputs the output signal of the demodulation processing portion.

3. (Previously Presented) The reproducing apparatus for the record medium as set forth in claim 2, further comprising: a rewriting portion controlled by the determining circuit portion for rewriting the management information contained in the output signal of the demodulation processing portion.

4. (Previously Presented) The reproducing apparatus for the record medium as set forth in claim 3, the rewriting portion comprising:

a generating portion for generating new management information corresponding to a control signal supplied from the determining circuit portion; and

an adding circuit portion for adding the new management information generated by the generating portion to the output signal of the demodulation processing portion.

5. (Previously Presented) The reproducing apparatus for the record medium as set forth in claim 3,

wherein the determining circuit portion permits the

output signal of the demodulation processing portion to be output and causes the rewriting portion to rewrite the management information when the management information permits the content data read from the record medium to be copied.

6. (Previously Presented) The reproducing apparatus for the record medium as set forth in claim 5,

wherein the determining circuit portion causes the rewriting portion to rewrite the management information so that the management information prohibits the content data read from the record medium from being copied.

7. (Previously Presented) The reproducing apparatus for the record medium as set forth in claim 3,

wherein the determining circuit portion prohibits the output signal of the demodulation processing portion from being output when the management information prohibits the content data read from the record medium from being copied.

8. (Previously Presented) The reproducing apparatus for the record medium as set forth in claim 1,

wherein when the determining circuit portion detects that an error occurs corresponding to one of the error detection code and the error correction code the determining circuit portion stops the operation.

9. (Previously Presented) The reproducing apparatus for

the record medium as set forth in claim 1,

wherein the determining circuit portion calculates a syndrome corresponding to the error detection code and determines whether an error occurs depending on whether the calculated syndrome is a predetermined value.

10. (Previously Presented) The reproducing apparatus for the record medium as set forth in claim 1,

wherein the determining circuit portion calculates a syndrome corresponding to one of the error detection code and the error correction code and determines whether an error occurs depending on whether the calculated syndrome is a predetermined value and corresponds to the management information.

11. (Previously Presented) The reproducing apparatus for the record medium as set forth in claim 10,

wherein the determining circuit portion determines that no error occurs when the calculated syndrome is zero and the management information permits the content data to be copied.

12. (Previously Presented) The reproducing apparatus for the record medium as set forth in claim 10,

wherein the determining circuit portion determines that no error occurs when the calculated syndrome is a predetermined value and the management information prohibits the content data from being copied.

13. (Previously Presented) The reproducing apparatus for the record medium as set forth in claim 10,

wherein the determining circuit portion determines that an error occurs when the calculated syndrome is a predetermined value and the management information permits the content data to be copied.

14. (Previously Presented) The reproducing apparatus for the record medium as set forth in claim 10,

wherein the determining circuit portion determines that no error occurs when the calculated syndrome is zero and the management information represents that the record medium is an original record medium.

15. (Previously Presented) The reproducing apparatus for the record medium as set forth in claim 10,

wherein the determining circuit portion determines that no error occurs when the calculated syndrome is a predetermined value and the management information represents that the record medium is a non-original record medium.

16. (Previously Presented) The reproducing apparatus for the record medium as set forth in claim 10,

wherein the determining circuit portion determines that an error occurs when the calculated syndrome is a predetermined value and the management information represents

that the record medium is an original record medium.

17. (Previously Presented) A reproducing method for a record medium, the reproducing method comprising the steps of:

performing a demodulating process for data read from a record medium on which content data are recorded, wherein management information and additional information are embedded in the content data; the management information correspond to copy management; and the additional information contains one of an error detection code and an error correction code added to the management information;

detecting the additional information from an output signal of the demodulation process;

performing an error detecting process corresponding to one of the error detection code and the error correction code of the detected additional information; and

controlling an output operation for an output signal on which the demodulating process has been performed for the content data read from the record medium corresponding to the management information when no error occurs in the error detecting process.

18. (Currently Amended) The reproducing method for the record medium as set forth in claim 17,

wherein the controlling step is performed by rewriting the management information and adding at least one of the error detection code and the error correction code to the rewritten management information ~~without modification when the~~

~~output signal.~~

19. (Previously Presented) The reproducing method for the record medium as set forth in claim 18, further comprising the step of:

permitting the output signal to be output and rewriting the management information when the management information permits the content data read from the record medium to be copied.

20. (Previously Presented) The reproducing method for the record medium as set forth in claim 18,

wherein the rewriting step is performed so that the management information prohibits the content data read from the record medium from being copied.

21. (Previously Presented) The reproducing method for the record medium as set forth in claim 19, further comprising the step of:

prohibiting the output signal from being output when the management information prohibits the content data read from the record medium from being copied.

22. (Previously Presented) The reproducing method for the record medium as set forth in claim 17, further comprising the step of:

stopping the operation when it is detected that an error

occurs corresponding to one of the error detection code and the error correction code.

23. (Previously Presented) The reproducing method for the record medium as set forth in claim 17, further comprising the step of:

calculating a syndrome corresponding to one of the error detection code and the error correction code and determining whether an error occurs depending on whether the calculated syndrome is a predetermined value.

24. (Previously Presented) The reproducing method for the record medium as set forth in claim 17, further comprising the step of:

calculating a syndrome corresponding to one of the error detection code and the error correction code and determining whether an error occurs depending on whether the calculated syndrome is a predetermined value and corresponds to the management information.

25. (Previously Presented) The reproducing method for the record medium as set forth in claim 24,

wherein when the calculated syndrome is zero and the management information permits the content data to be copied the result of the determining step represents that no error occurs.



26. (Previously Presented) The reproducing method for the record medium as set forth in claim 24,

wherein when the calculated syndrome is a predetermined value and the management information prohibits the content data from being copied the result of the determining step represents that no error occurs.

27. (Previously Presented) The reproducing method for the record medium as set forth in claim 24,

wherein when the calculated syndrome is a predetermined value and the management information permits the content data to be copied the result of the determining step represents that the error occurs.

28. (Previously Presented) The reproducing method for the record medium as set forth in claim 24,

wherein when the calculated syndrome is zero and the management information represents that the record medium is an original record medium the result of the determining step represents that no error occurs.

29. (Previously Presented) The reproducing method for the record medium as set forth in claim 24,

wherein when the calculated syndrome is a predetermined value and the management information represents that the record medium is a non-original record medium the result of the determining step represents that no error occurs.

30. (Previously Presented) The reproducing method for the record medium as set forth in claim 16,

wherein when the calculated syndrome is a predetermined value and the management information represents that the record medium is an original record medium the result of the determining step represents that the error takes place.

31. (Previously Presented) A data output controlling method, comprising the steps of:

detecting additional information from content data, wherein management information and additional information are embedded in the content data; the management information corresponds to copy management; and the additional information contains one of error detection code and error correction code added to the management information;

performing an error detecting process corresponding to one of the error detection code and the error correction code of the detected additional information; and

controlling an output operation for the content data corresponding to the management information when no error occurs in the error detecting process.

32. (Previously Presented) The data output controlling method as set forth in claim 31,

wherein the controlling step is performed by rewriting the management information and adding one of the error detection code and the error correction code to the rewritten

management information without modification when the content data is output.

33. (Previously Presented) The data output controlling method as set forth in claim 31, further comprising the step of:

stopping the operation when it is detected that the error occurs corresponding to one of the error detection code and the error correction code.

34. (Previously Presented) The data output controlling method as set forth in claim 31, further comprising the step of:

calculating a syndrome corresponding to one of the error detection code and the error correction code and determining whether the error occurs depending on whether the calculated syndrome is a predetermined value.

35. (Previously Presented) The data output controlling method as set forth in claim 31, further comprising the step of:

calculating a syndrome corresponding to one of the error detection code and the error correction code and determining whether the error occurs depending on whether the calculated syndrome is a predetermined value and corresponds to the management information.

36. (Previously Presented) The data output controlling method as set forth in claim 35,

wherein when the calculated syndrome is zero and the management information permits the content data to be copied a result of the determining step represents that no error occurs.

37. (Previously Presented) The data output controlling method as set forth in claim 35,

wherein when the calculated syndrome is a predetermined value and the management information prohibits the content data from being copied a result of the determining step represents that no error occurs.

38. (Previously Presented) The data output controlling method as set forth in claim 35,

wherein when the calculated syndrome is a predetermined value and the management information permits the content data to be copied a result of the determining step represents that the error occurs.

39. (Previously Presented) The data output controlling method as set forth in claim 35,

wherein when the calculated syndrome is zero and the management information represents an original record medium a result of the determining step represents that no error occurs.

40. (Previously Presented) The data output controlling method as set forth in claim 35,

wherein when the calculated syndrome is a predetermined value and the management information represents a non-original record medium a result of the determining step represents that no error occurs.

41. (Previously Presented) The data output controlling method as set forth in claim 35,

wherein when the calculated syndrome is a predetermined value and the management information represents an original record medium a result of the determining step represents that the error occurs.

42. (Currently Amended) A data outputting method, comprising the steps of:

rewriting management information when the management information and additional information are embedded in content data ~~and output~~, wherein the management information corresponds to copy management[[]] and the additional information contains one of error detection code and error correction code ~~added to the management information~~; adding at least one of the error detection code and the error correction code ~~without modification~~ to the rewritten management information; and outputting resultant data.

43. (Previously Presented) An error detecting method,

comprising the steps of:

pre-obtaining a syndrome corresponding to at least one of an error detection code and an error correction code when a part of the data to which one of error detection code and error correction code ~~has been~~ is added has been rewritten ~~corresponding to one of the error detection code and the error correction code;~~

obtaining a syndrome corresponding to one of the error detection code and the error correction code when the data is reproduced; and

detecting whether an error occurs corresponding to the obtained syndrome and the pre-obtained syndrome.

44. (Previously Presented) The error detecting method as set forth in claim 43,

wherein the detecting step is performed depending on one of whether the obtained syndrome is zero and whether the obtained syndrome matches the pre-obtained syndrome.

45. (Previously Presented) The error detecting method as set forth in claim 44,

wherein when one of the obtained syndrome is zero and the obtained syndrome matches the pre-obtained syndrome a result of the detecting step represents that no error occurs.

46. (Previously Presented) The error detecting method as set forth in claim 44,

wherein when one of the obtained syndrome is zero and the

obtained syndrome does not match the pre-obtained syndrome a result of the detecting step represents that the error occurs.

47. (Original) The error detecting method as set forth in claim 43,

wherein the detecting step is performed corresponding to the data, the pre-obtained syndrome, and the obtained syndrome.

48. (Previously Presented) The error detecting method as set forth in claim 43,

wherein when a part of the data is rewritten the detecting step is performed corresponding to the rewritten part of the data, the pre-obtained syndrome, and the obtained syndrome.

49. (Previously Presented) A data outputting and reproducing method, comprising the steps of:

adding one of error detection code and error correction code to data and outputting resultant data when a part of the data to which one of the error detection code and the error correction code has been added is rewritten;

pre-obtaining a syndrome when the part of the data is rewritten;

obtaining a syndrome corresponding to one of the error detection code and the error correction code when the data is reproduced; and

detecting whether an error occurs corresponding to the obtained syndrome and the pre-obtained syndrome.

50. (Previously Presented) The data outputting and reproducing method as set forth in claim 49,

wherein the detecting step is performed depending on one of whether the obtained syndrome is zero and whether the obtained syndrome matches the pre-obtained syndrome.

51. (Previously Presented) The data outputting and reproducing method as set forth in claim 50,

wherein when one of the obtained syndrome is zero and the obtained syndrome matches the pre-obtained syndrome the result of the detecting step represents that no error occurs.

52. (Previously Presented) The data outputting and reproducing method as set forth in claim 50,

wherein when one of the obtained syndrome is zero and the obtained syndrome does not match the pre-obtained syndrome the result of the detecting step represents that the error occurs.

53. (Original) The data outputting and reproducing method as set forth in claim 49,

wherein the detecting step is performed corresponding to the data, the pre-obtained syndrome, and the obtained syndrome.

54. (Previously Presented) The data outputting and



reproducing method as set forth in claim 49,

wherein when the part of the data is rewritten the detecting step is performed corresponding to the rewritten portion of the data, the pre-obtained syndrome, and the obtained syndrome.

55. (Previously Presented) The data outputting and reproducing method as set forth in claim 49,

wherein when the result of the detecting step represents that the error occurs the data are prohibited from being re-output.

56. (Previously Presented) The data outputting and reproducing method as set forth in claim 49,

wherein when the result of the detecting step represents that no error occurs the data are permitted to be re-output.